REMARKS/ARGUMENTS

Prior to this Amendment, claims 1, 2, and 6-60 were pending in the application.

Claim 1 is amended to include the limitation of dependent claim 60, which is canceled, to stress how the selection or matching of a design pattern type is performed so as to further distinguish claim 1 from the cited reference.

Independent claim 20 is amended to specify what group of design pattern types is used by the determiner in identifying a design pattern type matching an input computing problem, with dependent claims 21-24 being canceled. Such a group of pattern types is not shown by the cited reference.

Independent claim 39 is amended to include the limitations of dependent claims 48-57, which are canceled, to call for a specific group of design patterns from which an instance of a matching type of design pattern may be selected.

Claims 1, 2, 6-20, 25-47, 58, and 59 remain for consideration by the Examiner.

Claim Rejections Under 35 U.S.C. §102

The July 1, 2005 Office Action rejected claims 1, 2, and 6-60 under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,615,253 ("Bowman-Amuah"). This rejection is traversed based on the following remarks.

Independent claim 1 is directed to a method for providing a design pattern that includes "providing a plurality of design patterns having differing types, each of the design patterns comprising a description of design issues addressed by the particular design pattern and of the solution provided by the particular design pattern." Input is received "defining a programming problem" and then, a match of one of the types of the patterns is determined "based on the received input, wherein the matching one is determined by comparing the received input defining a

programming problem with the descriptions of design issues for the plurality of provided design patterns." A plurality of instances of the matched type is then provided which is followed by receiving selection input and returning the selected one of the design pattern instances. Bowman-Amuah fails to teach each and every one of the elements of claim 1, and Applicants request that the rejection be withdrawn.

More particularly, Bowman-Amuah fails to teach the "providing a plurality of design patterns having differing types" followed by "determining a matching one of the types of design patterns based on the received input." The Office Action cites Bowman-Amuah for teaching these steps of claim 1 at Fig. 41, col. 122, lines 50-67, col. 123, lines 1-67, col. 124, lines 1-67 and on, Fig. 2-3 with reference to the Summary, and col. 128, lines 20-65. Applicants disagree that Bowman-Amuah at these citations or elsewhere teach these steps of the method of claim 1.

In Figure 1, Bowman-Amuah shows a box labeled "Patterns" and implies these are used to form "components 4102" and "partitioned business components 4100." However, there is no teaching that a plurality of pattern types are provided, that input is received that defines a programming problem, and then, a matching one of the plurality of types is determined based on the defined problem. Instead, in Figure 42, Bowman-Amuah shows that patterns may be provided as best practices and productivity aids at 4200, 4202, 4204, and the like and then are used to create business process components. Again, there is no showing that these patterns are provided as a plurality of design patterns "having differing types." For this reason alone, Bowman-Amuah does not anticipate claim 1.

More significantly, though, Bowman-Amuah from col. 122, line 45 to col. 137, line 21 (and on) describes patterns generally and describes how these preferably are used to create components and partitioned business components. There is no explicit discussion of how patterns are used to form such components, though (see,

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for example, col. 131, lines 10-13 "it's important to note that patterns and frameworks are frequently used as starting points for designing and building this code" that is used to generate a partitioned business component). Applicants could find no teaching that other than recommending the use of patterns to make a component that a plurality of patterns of varying types are provided, input defining a problem is received, and then a type is matched to such input as called for in claim 1. Examples of patterns are provided in col. 131, lines 27-38 but are not described as being arranged or thought of as grouped into patterns that solve or address particular types of programming problems. Further, Figure 42 is described as illustrating the "role of patterns" in the invention and groups of patterns are provided in elements 4200, 4202, 4204 but these are not shown to be grouped or defined as types of design patterns and are simply taught as being a number of patterns that may be used in creating a business process component. Hence, this reference fails to teach the "providing" as defined in claim 1, and claim 1 is not anticipated.

Further, Applicants could find no teaching of "determining a matching one of the types of design patterns based on the received input." Bowman-Amuah suggests that a programmer should design its components based on a pattern or framework, but it never teaches that a design pattern is selected for use in creating its components for a programmer or that such a selection should/could be done based on received input defining a programming problem. The selection of a pattern is apparently left to the programmer. Instead, Bowman-Amuah is directed mainly to an application development style that concentrates on using the components to create applications (e.g., see, col. 133, line 1 through col. 136 in which Bowman-Amuah discusses the need for use of components and how to identify business components with reference to Figure 43). Note, a component is not a design pattern as called for in claim 1. Hence, Bowman-Amuah fails to teach

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the "determining of a matching one" step of claim 1 and fails to anticipate claim 1 for this additional reason.

Yet further, Bowman-Amuah fails to show "providing a plurality of instances of said matching type of design pattern." Bowman-Amuah teaches in Figure 41 and 42 providing or using patterns but does not show providing a plurality of instances for a matching type of design pattern as the reference does not show determining a match and then based on that determining providing a set of matching instances. Again, it appears that a developer of a component is required to select from the large group of patterns without the matching step and instance providing steps of claim 1 being provided (or suggested as useful). The Office Action cites col.128, lines 20-65, but at this citation Bowman-Amuah discusses converting business components into partitioned business components and provides not teaching of the matching instance providing step of claim 1. For this additional reason, claim 1 is not shown or suggested by this reference.

Still further, because these earlier steps are not shown, the final two steps of claim 1 involving receiving a selection of a member of the matching instances and returning the selected member cannot be shown by Bowman-Amuah. The Office Action cites Figures 54-57 of the reference for the selection input receiving step of claim 1, but at this citation, the reference is describing an "Abstraction Factor" (see, col. 192, line 40 and on) that involves converting data into concrete objects. There is no teaching of receipt of a selection of a particular design pattern from a number of instances of a particular matching type. The Office Action cites Bowman-Amuah at these same figures for teaching the returning step, but again, since no selection was received, the reference also does not teach this step. Applicants request that the rejection be withdrawn or more specific citations be provided in Bowman-Amuah for this teaching as Applicants could find no relevant teaching in Figures 54-57.

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Claims 2, 6-19, 58, and 59 depend from claim 1 and are believed allowable as depending from an allowable base claim. As will be discussed for independent claim 20, claim 58 calls for each of the design patterns to comprise "sample code for implementing the solution." Applicants could find no teaching in the definition and discussion of patterns of Bowman-Amuah that sample code would be provided as part of its patterns. No specific citation is provided in the Office Action for this limitation of claim 58 (or claim 20), and hence, a proper case for anticipation by Bowman-Amuah has not been provided in the Office Action. Claim 58 is believed allowable for this additional reason.

Independent claim 20 is directed to a design pattern locator that has similar limitations as claim 1, and hence, the reasons for allowing claim 1 are believed relevant to claim 20. Further, claim 20 calls for sample code to be provided with the design patterns, and Bowman-Amuah fails to describe the provision of sample code in its pattern definition (see, for example, col. 122, line 45 to col. 123, line 63). Claim 20 is also amended to call for particular design pattern types to be used by the determiner. The Office Action cites Bowman-Amuah at Figures 8, 9, 34, 35, 37, and 38 for teaching such design pattern types. However, Applicants could find no discussion of patterns and clearly, not of the five types called for in claim 20. "Business" components are discussed, but as mentioned above, components in Bowman-Amuah are not design patterns but instead can be formed using patterns. Patterns are shown in Figures 41 and 42 but the specification that describes these figures does not discuss grouping design patterns into types and does not discuss the types of claim 20. Based on these remarks, the rejection of claim 20 is believed improper, and Applicants respectfully request that claim 20 be found allowable over this reference.

Claims 25-38 depend from claim 20 and are believed allowable, at least, because they depend from an allowable base claim.

Independent claim 39 is directed to a computer program product with limitations similar (but in differing form) as claim 1. Hence, the reasons for allowing claim 1 are believed applicable to claim 39. Additionally, as amended, claim 39 provides a group of particular design patterns from which a member is selected. Bowman-Amuah teaches that it is a best practice to consider using design patterns in creating a business component, but this reference fails to teach any of the specific design patterns called for in claim 39. From the Office Action, it is not clear where the Examiner believed these design patterns to be taught. They are not shown in the citations provided for claim 2 (i.e., not found in Figures 8, 9, 34, 35, 37 and 38) and are not taught in the full discussion of patterns that begins at col. 122, line 45. Hence, Applicants request that this rejection be withdrawn.

Claims 40-47 depend from claim 39 and are believed allowable as depending from an allowable base claim. Additionally, the reason provided for allowing claim 20 is believed applicable to claims 40-44.

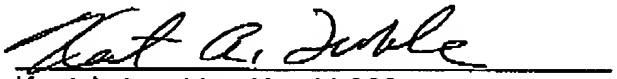
Conclusions

Based on the above remarks, it is requested that a timely Notice of Allowance be issued in this case.

No fee is believed due for this submittal. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

July 20, 2005



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